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Stolowitz Ford Cowger LLP 621 SW Morrison St Suite 600 Portland, OR 97205			EXAMINER MCCOMMAS, BRENDAN N	
			ART UNIT 2625	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/662,859

## Applicant(s)

KUO, SHIH-ZHENG

## Examiner

BRENDAN MCCOMMAS

## Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 29 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 10-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 10-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 1-3 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashimizu (US Patent 6,040,923), in view of Iizuka (US Patent 6,721,009) further in view of Sakakibara et al. (United States Patent Publication 2003/0053157) hereinafter referenced as Sakakibara further in view of Furuoya (United States Patent 5,805,294).

17. **Regarding claim 1**, Takashimizu discloses a method, using an optical image reading apparatus, with an optical sensing device (40-1) used to scan an image line by line, and exhibited in figure 2, comprising: setting CCD reading width using, "a size sensor 44, which detects a paper size such as B5, A4, B4, and A3 from the width of the paper fed into the paper transfer path 20. Reading widths of the line CCDs 40-1 and 40-2 of the face reading unit 38-1 and back side reading unit 38-2 are set by this size detection using the paper width."

18. In addition Takashimizu discloses charge processing where, "The face reading unit 38-1 incorporates a line CCD 40-1, optically reads an image on the surface of the

paper 18 passing a reading point 62 on the paper transfer path 20, converts the image into an electric signal, and finally generates image data based on the various image portions scanned," and reads on claimed step of, *"processing the induced charges corresponding to the effective region to form at least a piece of an image associated with the document,"* as disclosed in column 8, lines 48-53.

19. Takashimizu discloses the image scanning method in columns 3-6 and the device is exhibited in figure 2. However Takashimizu fails to disclose the steps of, *"fetching out the induced charges corresponding to the front region and the effective region, and transferring the induced charges corresponding to the post region produced when scanning the first portion to the front pixel region."*

20. However the examiner maintains that it was well known in the art for the optical reading method disclosed in Takashimizu to, *"fetch out the induced charges corresponding to the front region and the effective region for the first portion, and transferring the induced charges corresponding to the post region produced when scanning the first portion to the front pixel region,"* as taught by Iizuka.

21. In a similar field of endeavor, Iizuka discloses a method of driving a solid state imaging device. In addition Iizuka discloses *"fetch out the induced charges corresponding to the front region and the effective region for the first portion, and transferring the induced charges corresponding to the post region produced when scanning the first portion to the front pixel region,"* as disclosed in column 13, lines 60-67 and column 14, lines 10-16.

22. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu to include *"fetching out the induced charges corresponding to the front region and the effective region for the first portion, and transferring the induced charges corresponding to the post region produced when scanning the first portion to the front pixel region,"* for the purpose of decreasing the effects of radiation on the solid state imaging device, as disclosed in Iizuka, column 3, lines 32-49.

22. Takashimizu discloses the image scanning method in columns 3-6 and the device is exhibited in figure 2. However Takashimizu fails to disclose the steps of, *"shielding at least one of the front region or the post region of the optical sensing device from light when scanning the document and in the transfer step wherein the shielding inhibits an overflow of induced charges in the front region when scanning the second portion of the document."*

23. However the examiner maintains that it was well known in the art for the optical reading method disclosed in Takashimizu to, *"shielding at least one of the front region or the post region of the optical sensing device from light when scanning the document and in the transfer step wherein the shielding inhibits an overflow of induced charges in the front region when scanning the second portion of the document,"* as taught by Sakakibara.

24. In a similar field of endeavor, Sakakibara discloses an image inputting apparatus, and image forming apparatus using a four line CCD sensor. In addition Sakakibara discloses *"shielding at least one of the front region or the post region of the optical*

*sensing device from light when scanning the document and in the transfer step wherein the shielding inhibits an overflow of induced charges in the front region when scanning the second portion of the document, as disclosed in [0060], [0092]-[0093] and [0112].*

25. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu to include *"shielding at least one of the front region or the post region of the optical sensing device from light when scanning the document and in the transfer step wherein the shielding inhibits an overflow of induced charges in the front region when scanning the second portion of the document* for the purpose of reading a certain size of paper with minimal defects, as disclosed in Sakakibara, [0060].

26. However Takashimizu and Sakakibara do not disclose pre scanning one or more portions of a document with an optical sensing device to determine an effective region of the optical sensing device that corresponds to the scanned document. However it would have been obvious to one of ordinary skill in the art at the time of the invention to include such a modification as taught by Furuoya. In a similar field of endeavor, Furuoya discloses a document size detection by a prescan having an acceleration region. In addition Furuoya discloses pre scanning one or more portions of a document with an optical sensing device to determine an effective region of the optical sensing device that corresponds to the scanned document, and scanning at least a first portion of the document to produce induced charges in the optical sensing device as disclosed in column 8, lines 40-52. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu to include the

modification of Furuoya for the purpose of reading a certain size of paper with minimal defects, as disclosed in Furuoya column 2, lines 1-10.

23. **Regarding claim 2**, Takashimizu and Iizuka disclose everything claimed as applied above (see claim 1). In addition Iizuka discloses a method wherein the front pixel region and the post pixel region are located at the two sides of the effective region, as disclosed in column 11, lines 34-45 and exhibited in figure 3B.

24. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu wherein the front pixel region and the post pixel region are located at the two sides of the effective region, for the purpose of decreasing the effects of radiation on the solid state imaging device, as disclosed in Iizuka, column 3, lines 32-49.

25. **Regarding claim 3**, Takashimizu and Iizuka disclose everything as applied above (see claim 1) in addition Takashimizu discloses in column 8, lines 49-50, that "the face reading unit incorporates 38-1 a line CCD 40-1" which reads on the "*optical sensing device comprising an optical charge coupled device (CCD).*"

26. **Regarding claim 12**, Takashimizu and Iizuka disclose everything claimed as applied above (see claim 1). In addition Iizuka discloses the method which further comprises adding the data contained in the induced charges transferred from the post region to data read in the induced charges generated by the front region in the scan of the second (or next) portion, as disclosed in column 13, lines 60-67 and column 14, lines 10-16.

27. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu to include adding the data transferred from the post region to data generated by the front region in the scan of the second (or next) portion, for the purpose of decreasing the effects of radiation on the solid state imaging device, as disclosed in Iizuka, column 3, lines 32-49.

28. **Claims 10-11, and 13-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashimizu (US Patent 6,040,923), in view of Iizuka (US Patent 6,721,009) further in view of Watanabe (United States Patent 7,034,969).

29. **Regarding claim 10**, Takashimizu and Iizuka disclose everything claimed as applied above (see claim 1). However Takashimizu and Iizuka fail to explicitly disclose a method further comprising sequentially reading the induced charges corresponding to the front region and the effective region without reading the induced charges corresponding to the post region.

30. However it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the method of Takashimizu and Iizuka, to include the step of sequentially reading the induced charges corresponding to the front region and the effective region without reading the induced charges corresponding to the post region as taught by Watanabe.

31. In a similar field of endeavor Watanabe discloses a divided one-dimensional solid-state imaging device, method of controlling one-dimensional solid-state imaging device, and image reading apparatus and method using the same. In addition Watanabe discloses a method which includes the step of sequentially reading the



induced charges corresponding to the front region and the effective region without reading the induced charges corresponding to the post region, as disclosed in column 11, lines 63-67, and column 12 lines 1-15.

32. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu and Iizuka to further comprise sequentially reading the induced charges corresponding to the front region and the effective region without reading the induced charges corresponding to the post region, for the purpose of reducing the time required to scan a photographic image, as disclosed in Watanabe, column 3, lines 30-38.

33. **Regarding claim 11**, Takashimizu, Iizuka and Watanabe disclose everything claimed as applied above (see claim 1). In addition Watanabe discloses a method where the induced charges corresponding to the effective region (region M) are processed to form at least the piece of the image associated with the document, further comprising discarding (and not using to create the image) the induced charges associated with the front region of the optical sensing device, as disclosed in column 11, lines 57-62 and column 12, lines 24-27.

34. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu and Iizuka to further comprise where the induced charges corresponding to the effective region (region M) are processed to form at least the piece of the image associated with the document, further comprising discarding (and not using to create the image) the induced charges associated with the front region of the optical sensing device, for the purpose of

reducing the time required to scan a photographic image, as disclosed in Watanabe, column 3, lines 30-38.

35. **Regarding claim 13**, Takashimizu, Iizuka and Watanabe disclose everything claimed as applied above (see claim 1). In addition Watanabe discloses the method further comprising: determining at least another portion (a different frame) of the document (film strip) to be scanned; and scanning another portion of the document to determine at least another piece of the image associated with the document (film strip in this case), as disclosed in column 8, lines 8-21.

36. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu and Iizuka to further comprise determining at least another portion (a different frame) of the document (F) to be scanned; and scanning another portion of the document to determine at least another piece of the image associated with the document (F), for the purpose of reducing the time required to scan a photographic image, as disclosed in Watanabe, column 3, lines 30-38 and exhibited in figure 1.

37. **Regarding claim 14**, Takashimizu, Iizuka and Watanabe disclose everything claimed as applied above (see claim 13). In addition Watanabe discloses a second fine scanning step, further comprising generating the image associated with the document (film strip in this case) from pieces of the image formed from processing of the induced charges, as disclosed in column 8, lines 16-21.

39. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Takashimizu and Iizuka to further

comprise a second fine scanning step, further comprising generating the image associated with the document (film strip in this case) from pieces of the image formed from processing of the induce charges, for the purpose of reducing the time required to scan a photographic image, as disclosed in Watanabe, column 3, lines 30-38 and exhibited in figure 1.

1. **Claim 15, 16-19 and 22-24** is rejected under 35 U.S.C. 103(e) as being anticipated by Watanabe (U.S. Patent Publication 7,034,969) further in view of Sakakibara et al. (United States Patent Publication 2003/0053157) hereinafter referenced as Sakakibara, further in view of Furuoya (United States Patent 5,805,294).
2. **Regarding claim 15**, Watanabe discloses a divided one-dimensional solid-state imaging device, method of controlling one-dimensional solid-state imaging device, and image reading apparatus and method using the same. In addition Watanabe discloses a method comprising: detecting light with the sensing device when scanning at least a first portion of a document (in this case film strip, but it can be a document), the sensing device having an effective region that corresponds to at least a portion of the scanned document, and one or more non-document regions, as disclosed in column 3, lines 18-30 and column 11, lines 49-62; reading data corresponding to the light detected in the effective region of the sensing device without reading at least some data corresponding to light detected in at least one non-document region (section K) of the sensing device, as disclosed in column 12, lines 10-13; and generating a scanned image associated with the document, at least in part, from the data corresponding to the effective region of the sensing device, as disclosed in column 11, lines 58-62. However Watanabe fails to

explicitly disclose the step of shielding at least one of the non-document regions of the sensing device from light when scanning the document, wherein the shielding inhibits overflow of induced charges in at least one of the non-document regions when scanning a second portion of the document.

3. However the examiner maintains that it was well known in the art for the optical reading method disclosed in Watanabe to, "shield at least one of the non-document regions of the sensing device from light when scanning the document, wherein the shielding inhibits overflow of induced charges in at least one of the non-document regions when scanning a second portion of the document.as taught by Sakakibara.

4. In a similar field of endeavor, Sakakibara discloses an image inputting apparatus, and image forming apparatus using a four line CCD sensor. In addition Sakakibara discloses "shielding at least one of the non-document regions of the sensing device from light when scanning the document, wherein the shielding inhibits overflow of induced charges in at least one of the non-document regions when scanning a second portion of the document", as disclosed in [0060], [0092]-[0093] and [0112].

5. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Watanabe to include "shielding at least one of the non-document regions of the sensing device from light when scanning the document, wherein the shielding inhibits overflow of induced charges in at least one of the non-document regions when scanning a second portion of the document.for the purpose of reading a certain size of paper with minimal defects, as disclosed in Sakakibara, [0060].

6. However Watanabe and Sakakibara do not disclose pre scanning one or more portions of a document with an optical sensing device to determine an effective region of the optical sensing device that corresponds to the scanned document. However it would have been obvious to one of ordinary skill in the art at the time of the invention to include such a modification as taught by Furuoya. In a similar field of endeavor, Furuoya discloses a document size detection by a prescan having an acceleration region. In addition Furuoya discloses pre scanning one or more portions of a document with an optical sensing device to determine an effective region of the optical sensing device that corresponds to the scanned document, and scanning at least a first portion of the document to produce induced charges in the optical sensing device as disclosed in column 8, lines 40-52. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Watanabe and Sakakibara to include the modification of Furuoya for the purpose of reading a certain size of paper with minimal defects, as disclosed in Furuoya column 2, lines 1-10.

9. **Regarding claim 16**, Watanabe, Sakakibara and Furuoya disclose everything claimed as applied above (see claim 15). In addition Watanabe discloses a method wherein defining one or more non-document regions in the sensing device, further comprises: defining a front region (J) in the sensing device according to a width of the document to be scanned, as disclosed in column 11, lines 63-66; and defining a post region in the sensing device according to the width of the document to be scanned, where the front region and the post region are adjacent to the effective region as disclosed in column 12, lines 9-15 and exhibited in figures 6A-B and figure 7.

10. **Regarding claim 17**, Watanabe, Sakakibara and Furuoya disclose discloses everything claimed as applied above (see claim 16). In addition Watanabe discloses a method further comprising sequentially reading data corresponding to the light detected in the front region and the effective region without reading data corresponding to the light detected post region, as disclosed in column 11, lines 63-67, and column 12 lines 1-20.

11. **Regarding claim 18**, Watanabe, Sakakibara and Furuoya disclose discloses everything claimed as applied above (see claim 16). In addition Watanabe discloses a method wherein generating a scanned image associated with the document (in this case film strip) further comprises discarding the data associated with the front region of the sensing device and not using it for imaging, as disclosed in column 11, lines 60-62; and processing data associated with the effective region of the sensing device to generate the scanned image, as disclosed in column 11, lines 63-64.

12. **Regarding claim 19**, Watanabe, Sakakibara and Furuoya disclose discloses everything claimed as applied above (see claim 16). In addition Watanabe discloses a method further comprising associating at least some data from a scan of the first portion (in this case a frame) of the document to data from a scan of a second portion (in this case another frame), of the document as disclosed in column 8, lines 16-21.

13. **Regarding claim 22**, Watanabe, Sakakibara and Furuoya disclose discloses everything claimed as applied above (see claim 15). In addition claim 22 is rejected for similar reasons as claim 15. Claim 22 describes an apparatus and claim 15 describes the exact method implemented by the apparatus. Thus claim 22 is rejected.

14. **Regarding claim 23**, Watanabe, Sakakibara and Furuoya disclose discloses everything claimed as applied above (see claim 22). In addition claim 23 is rejected for similar reasons as claim 16. Claim 22 describes an apparatus and claim 16 describes the exact method implemented by the apparatus. Thus claim 23 is rejected.

15. **Regarding claim 24**, Watanabe, Sakakibara and Furuoya disclose discloses everything claimed as applied above (see claim 23). In addition claim 24 is rejected for similar reasons as claim 18. Claim 24 describes an apparatus and claim 18 describes the exact method implemented by the apparatus. Thus claim 24 is rejected.

40. **Claims 20-21 and 25-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (United States Patent 7,034,969) in view of Iizuka (United States Patent 6,721,009).

41. **Regarding claim 20**, Watanabe discloses everything claimed as applied above (see claim 19). However Watanabe fails to explicitly disclose the method wherein associating at least some data from the scan of the first portion of the document to data from the scan of the second portion of the document further comprises transferring the data from the scan of the first portion of the document corresponding to the post region of the front region of the sensing device for use during the scan of the second portion of the document.

42. However it would have been obvious to one of ordinary skill in the art at the time of the invention to include such a modification to the invention of Watanabe, as taught by Iizuka.

43. In a similar field of endeavor, Iizuka discloses a method of driving a solid state imaging device. In addition Iizuka discloses the method wherein associating at least some data from the scan of the first portion of the document to data from the scan of the second portion of the document further comprises transferring the data from the scan of the first portion of the document corresponding to the post region of the front region of the sensing device for use during the scan of the second portion of the document (in this case, the following scan line), as disclosed in column 13, lines 60-67 and column 14, lines 10-16.

44. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Iizuka to include associating at least some data from the scan of the first portion of the document to data from the scan of the second portion of the document further comprises transferring the data from the scan of the first portion of the document corresponding to the post region of the front region of the sensing device for use during the scan of the second portion of the document (in this case, the following scan line), for the purpose of decreasing the effects of radiation on the solid state imaging device, as disclosed in Iizuka, column 3, lines 32-49.

45. **Regarding claim 21,** Watanabe and Iizuka disclose everything claimed as applied above (see claim 20). In addition Iizuka discloses the method further comprising adding the data transferred from the post region to data generated by the front region in the scan of the second portion of the document (in this case the following scan line), as disclosed in column 13, lines 60-67 and column 14, lines 10-16.



46. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Iizuka to include adding the data transferred from the post region to data generated by the front region in the scan of the second portion of the document for the purpose of decreasing the effects of radiation on the solid state imaging device, as disclosed in Iizuka, column 3, lines 32-49.

47. **Regarding claim 25**, Watanabe and Iizuka disclose everything claimed as applied above (see claim 23). In addition claim 25 is rejected for similar reasons as claim 20. Claim 25 describes an apparatus and claim 20 describes the exact method implemented by the apparatus. Thus claim 25 is rejected.

48. **Regarding claim 26**, Watanabe and Iizuka disclose everything claimed as applied above (see claim 25). In addition claim 26 is rejected for similar reasons as claim 21. Claim 26 describes an apparatus and claim 21 describes the exact method implemented by the apparatus. Thus claim 26 is rejected.

### ***Response to Arguments***

49. Applicant's arguments filed 02/26/2009 have been fully considered but they are respectfully considered moot on the new grounds of rejection. On page 8 of the Applicant's rejection, the Applicant argues, 'The Examiner appears to allege Furuoya's pre-scan of a document discloses the recited pre-scanning. There is no disclosure in Furuoya, however, of the digital copying machine pre- scanning to determine an effective region of the sensing device that corresponds to the scanned document as the

claim recites. Instead, Furuoya pre-scans the document to determine its size, which in turn is utilized with a user-requested magnification to select a paper size for an enlarged copy of the document. Put differently, Furuoya's pre-scan to detect a document size is distinctly different than the recited pre-scanning one or more portions of a document with a sensing device to determine an effective region of the sensing device that corresponds to the scanned document.' However the Examiner disagrees and points to the effective scanning region as exhibited in figure 3 which reads on claimed 'effective region of the sensing device'. The Examiner recommends further defining effective region to overcome Furuoya. On page 9 of the Applicant's remarks, the Applicant argues, 'Furthermore, there is no motivation or reason to combine Furuoya's pre-scanning activities with Watanabe or Sakakibara, as both Watanabe and Sakakibara pre-set their respective image sensors. See, e.g., Watanabe, col. 11, lines 49-62, where Watanabe discloses presetting its regions 42-1, 42-2, and 42-3 of the CCD regardless of film size and projection area; see, e.g., Sakakibara, Figure 8 and corresponding portions of the specification, where Sakakibara presets its scanning regions based on the resolution of the scan, for example, Sakakibara includes preset dummy pixels in its CCD line sensor that are adjacent to its preset 7500 effective pixels' However the Examiner respectfully disagrees, and argues that even though these regions are set before the scan takes place, the effective image region which is described in Furuoya figure 3, could be used to modify the invention of Watanabe and Sakakibara for the purpose of reading a certain size of paper with minimal defects, as disclosed in Furuoya column 2, lines 1-10. On page 9 of the Applicant's arguments, the Applicant argues, '

There is no disclosure in Iizuka, however, of fetching the induced charges corresponding to the front region and the effective region for the first portion of the document. See, e.g., Iizuka, col. 8, lines 57-61, where Iizuka discharges the unnecessary portion L1 and transfers the necessary portion C 1 to an output section 5. Put differently, Iizuka's discharging of the unnecessary portion L 1 is distinctly different than transferring the portion to the output section 5, and thus Iizuka fails to teach or suggest fetching the induced charges corresponding to the front region and the effective region for the first portion of the document.' However the Examiner respectfully disagrees and points to col 8, lines 57-61, where the necessary portion R1 and C1 corresponds to the front region and the effective region of the scan as exhibited in figure 1C. On page 11 of the Applicant's arguments, the Applicant argues, 'There is no disclosure in Sakakibara of shielding a front region and a post region of the optical sensing device from light when scanning the document. See, e.g., Sakakibara, paragraph [0060], where Sakakibara shields light from a single region of a CCD located adjacent to a dummy pixel region. Sakakibara, further, does not teach or suggest shielding that inhibits an overflow of induced charges in the front region when scanning the second portion of the document. See, e.g., Sakakibara, Figures 8 and 18; and paragraphs [0092]-[0093], where Sakakibara discloses utilizing the shielding portion to reduce an amount of incident light reaching a selected group of pixels in order to improve filtering of the non-effective pixels, not to stop an overflow as the claim recites.' The Examiner respectfully disagrees and argues that in [0092]-[0093] Sakakibara discloses utilizing the shielding portion to reduce an amount of incident light reaching a

selected group of pixels (the selected pixels can be changed to include the front and post regions, as disclosed in [0060].) As well, the shielding by definition stops any overflow of light/signals from reaching the effective region of 7500 pixels.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENDAN MCCOMMAS whose telephone number is (571)270-3575. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Brendan N. McCommas/  
Examiner, Art Unit 2625

/Mark K Zimmerman/

Supervisory Patent Examiner, Art Unit 2625